

# Development of Mathematics Textbooks Through Fable Stories To Strengthen Student Character Using Problem Based Learning

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## Abstract

The purpose of this study is to develop textbooks, to know attractiveness, and to know the increase in student learning outcomes. Problems in this study are low learning outcome and weak character. The research method uses Research and Development with the design of One Group Pretest-Posttest Design. Data collection techniques used questionnaires, observations and tests. The population of this research is the fourth grader of SD Negeri Gugus III Gadingrejo which is 263 students. Sampling by Cluster Random Sampling as many as 60 students. The result of the research is the realization of the mathematics textbook product based on fable, the attractiveness of the textbook, the increase of experimental class learning result of pretest average of 61.50 posttest 75.00 with the gain of 0.39 and the students character of the experimental class the pretest average value 2.32 posttest 3.46 with gain of 0.74 after using textbook through fable story using Problem Based Learning.

**Keywords:** Mathematics Textbook, Fable Story, Problem Based Learning

## 1. Introduction

The 2013 curriculum in primary and secondary education in indonesia comprises the basic framework of the curriculum and curriculum structure. Implementation of learning in Primary School / Islamic Primary School (SD / MI) is conducted with an integrated thematic approach, except for Mathematics and Physical Education of Sport and Health as a separate subject for classes IV, V and VI.

Separation of mathematics subjects from integrated thematic book because students will not get the concept of mathematics in depth if still integrated in thematic integrated maple. With these considerations, in the 2017 revision in the Curriculum 2013, Mathematics and PJOK subjects are finally separated from general thematic subjects. In the handbook used a separate book of math books and books Physical Education of Sport and Health.

Implementation and character reinforcement should be applicable to all existing subjects, including the application of characters to math lessons. Mathematics learning is very different from learning in other subjects, where learning of mathematics requires an understanding of the whole concept that involves the results of their experiences in everyday life.

As a solution to grow the character and improve learning outcomes is by teaching materials that contain characters and be able to make students active, interested and able to solve problems in life by using the concept of knowledge is known and able to understand the lesson well. Teaching materials as learning media, and has an important role in the learning process that is as a reference for students and teachers to improve learning outcomes.

Textbooks are an important part of the learning process. Mulyasa (2006: 96) argued that the textbook is one part of the teaching resources that can be interpreted something that contains learning messages, both specific and general nature that can be utilized for the benefit of learning. Mulyasa (2006: 96) adds that the form of teaching materials are: print materials (hand outs, books, modules, worksheets, brochures, and leaflets), audio (radio, cassette, audio cd), visual (photo or picture) (such as video / film or VCD) and multi media (such as interactive CD, computer based, and internet).

Komalasari (2010: 43) states that the textbook is a textbook in a particular field of study which is a standard book, prepared by experts in the field with instructional intent and purpose, equipped with the means of learning that harmonious and easily understood by the wearer in schools and high spaces so as to support a learning program.

Further Lestari Ika (2013: 2-3) mentions A good textbook should include: (1) study instructions (teacher and student manual); (2) the competence to be achieved; (3) supporting information; (4) exercises; (5) the work manual may be a worksheet (LK); and (6) evaluation. With the textbook allows students to learn a competence in a coherent and systematic so that the accumulative able to master all the competencies as a whole and integrated.

According to Suwito Anton, (2012: 1). Integrating the values of the characters in each subject with the purpose to instill the values in the learner of the importance of character education, so that expected every learner is able to internalize the values into everyday behavior through the learning process, whether that takes place in in and out of the classroom. Basically learning activities, in addition to making learners master the targeted competence (material), are also designed to make learners recognize, aware / care, and internalize the values and make it behavior.

According to Kemendiknas (2010: 19), Values of characters developed in the learning of mathematics must still be based on universal values. Through this learning activity, teachers can develop values such as honest character, democracy, responsible, independent, discipline, *kerjakeras*, creative, curiosity and so forth.

In addition to the textbook to improve student learning outcomes, learning methods should also be made interesting and can make students interested, Model Problem Based Learning is a learning that begins by confronting students on a problem designed primarily to help students develop thinking skills, skills to solve problems, and intellectual skills, students experience real or real situations and become independent and autonomous learners.

The result of requirement analysis done by researcher on April 15, 2018 through interview with some grade 4 teacher in region of cluster III of Gadingrejo Subdistrict, found that there are several factors causing low result of learning of Mathematics of fourth graders of elementary school in Sub Gadingrejo of cluster III region, In terms of teaching and learning process is the lack of learning resources in the form of a mathematics textbook that contains the program characters have not been there, not using the appropriate learning model to support the learning process, the method of learning mathematics less interesting and fun.

These problems have an impact on the normative results of students who have not maximized and the value is still below the KKM. As a solution to grow the character and improve the learning outcomes is with textbooks that contain characters and be able to make students active, interested and able to solve problems in life by using the concept of knowledge that is known, and able to understand the lessons well.

Problem Based Learning Learning is a learning where students do authentic problems with the intention to compile their own knowledge, develop high-level thinking ability, develop self-reliance and self-confidence Arends in Trianto, (2011: 68). According to Suprihatiningrum (2013: 215), Problem-based learning is a model of learning that from the beginning students are faced with a problem, then followed by the process of seeking information that is student centered.

Syntax or steps on Problem Based Learning According to Suprihatiningrum, (2013: 223), as follows: 1) Student orientation to authentic problems. 2) Organize students in learning. 3) Guiding students individually or in groups in conducting research. 4) Develop and present the work. 5) Analysis and evaluation of problem-solving process.

The development of mathematics textbooks through fables based on Problem Based Learning is expected to grow the character, attract students' interest and can improve student learning outcomes in Mathematics learning especially in grade IV of elementary school. In accordance with research Ridwan, M (2016) Research in accordance with research that researchers developed that is inculcating characters through fable stories in subjects especially mathematics in elementary school.

The purpose of this research is to produce mathematics textbook product through fable story to strengthen student character using Problem Based Learning, to know the attractiveness of mathematics textbook through fable story using Problem Based Learning, and to know the improvement of student learning result before and

after using textbook of math through fable using Problem Based Learning.

## 2. Research Method

The research method used in this research is Research and Development, According Sujadi (2003: 164) R & D method of research methods that produce a specific product and test the effectiveness of the product. The product developed is the development of mathematics textbooks through fable stories to strengthen the character of students using problem-based learning grade IV Primary School. The design of the study used the design of The Randomized Pretet-Posttest Control Group Design.

The steps in this development study according to Borg and Gall in Sugiyono (2011: 298), are as follows 1) Collection of preliminary information 2) Planning 3) Development of initial product format 4) Experimental trials of materials, 5) Product revisions 6) Field trials 7) Product revisions 8) Field trials 9) Revised final product 10) Dissemination and Implementation.

Researchers conduct research from step 1 to step 7 is the step of research and collection of initial information up to the step of product revision. This is done due to limited time and cost. Based on these reasons, the researcher has aligned the development research procedure and adapted it to the purpose and condition of the actual research.

The population in this study was taken only 10 State Elementary Schools in Region Cluster III which amounted to 263 students, this is done because the number of primary schools located in District Gadingrejo Pringsewu district year 2017/2018. According Sugiyono (2008: 91) determination of the number of samples in this study conducted by Cluster Random Sampling technique. The number of schools located in District 3 Gadingrejo District Pringsewu District is quite a lot, then the determination of Cluster Sampling is already representing schools from the Area of Cluster III, so the sample in this study is 60 students of SDN 2 Tulungagung amounted to 30 students and SDN 3 Tulungagung amounted to 30 students.

Data collection techniques used in this study are interviews, questionnaires and tests. Interview techniques are used as data collection techniques when researchers conduct preliminary studies to find the issues to be researched, and want to know the things of the respondents more in depth. Questionnaires were given to collect data on the responses of the mathematics-based mathematics teaching material component. Prior to the data collection conducted test instrument research include test validity, reliability, difficulty and distinguishing power.

Validity is to see if the measuring instrument is able to measure what will be measured, the criterion of test if the value of  $r$  count is greater than the value of  $r$  table, then the problem is valid and can be used for testing data. Result of validity test item to measure student's mathematics learning result 20 item about everything valid because  $r$  value count bigger than  $r$  table value (0,444).

Test item reliability to see if the measuring tool is able to deliver consistent measurement results in different times and places. Criteria test if the value of  $r$  count is greater than the value of  $r$  table then the problem is reliable and can be used for testing data. Result of reliability test  $r$  count equal to 0,858 bigger than  $r$  table equal to 0,444, hence matter all reliable and can be used in this research.

The result of the test of the level of difficulty of the item to measure the students' mathematics learning result is obtained that 17 items of moderate difficulty are: 1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20. While 3 points difficult level that is number 5, 8, 17. Thus most of the items to measure student learning outcomes level of difficulty is categorized being.

The results of testing the differentiation of the items on the students' mathematics learning result turned out that all 20 items had a differentiating power level that is categorized enough between 0.3 to 0.5 so that all items of question to measure student learning outcomes can be used in this study.

The normality test results found that the sample came from a population with an abnormal distribution. This means that the data distribution of mathematics learning outcomes of students on each sample does not meet the assumption of normality, so no need to test homogeneity. As can be seen in the following table.

**Table.1 Data Normality Test Results**

Results of Student Mathematics Learning	$\chi^2_{count}$	$\chi^2_{table}$	Category
SDN 2 Tulungagung	19,95522	11,0705	Abnormal
SDN 3 Tulungagung	14,51420	11,0705	Abnormal

### 3. Research Results And Discussion

This research is a research development of education with product of development result that is textbook through fable story using Problem Based Learning model for Class IV SD.

#### 3.1 Analysis of Teacher and Student Needs

The results of data collection through a questionnaire about the needs of teachers to the development of textbooks through fable stories using Problem Based Learning model for Class IV Elementary School which is incorporated in cluster III Tulungagung District Gadingrejo, obtained preliminary data as follows: 1) The results of student learning in math lessons especially in the square, rectangular and triangular flat matter, still have not reached the KKM. 2) Textbooks used by teachers are book packages that are still very limited, teachers have not made their own books that suit the needs of students. 3) Teachers have not used an interesting learning model in the process of teaching and learning activities. 4) The teacher states that it requires the development of textbooks in an interesting form to achieve the learning objectives so as to improve student learning outcomes. 5) Teachers difficulty inculcating the honest character, discipline and responsibility of students in learning especially mathematics.

Next data collection through questionnaire about the needs of grade 4 students SDN 2 Tulungagung as follows: 1) Students lack spirit in learning activities so that the learning outcomes have not reached KKM. 2) Student learning activity less attention to teacher explanation, because less interesting and boring. 3) Students are less able to understand the flat wake material presented by the teacher. 4) The teaching materials used by the students are limited text book material. 5) Learning models used by teachers are less able to develop students' ability to solve problems. 6) Honest character, discipline and responsibility of student in learning especially math not yet seen in learning mathematics.

Based on the results of data collection through questionnaires about the needs of teachers and students, it is necessary to hold the development of textbooks through fable stories to strengthen the character using Problem Based Learning model, in SD Negeri located in cluster III District Gadingrejo Pringsewu District. So that textbook can help students more easily to understand the material, make students more active and the spirit of following the learning, the character of students become strong and student learning outcomes to increase. According Takahashi (2016: 313-319) This research is relevant to the research that the author is developing that is about the use of textbooks mathematics to solve problems in learning mathematics. The description shows that the need to develop textbook through fable story using Problem Based Learning model, in cluster III District Gadingrejo Pringsewu District. This is in accordance with the research of Kilic, Cigdem (2013: 38) In this journal The results show that elementary school students in Turkey show significant improvement in learning outcomes when students use textbooks of mathematics.

#### 3.2 Product Planning

The curriculum used in this research is the 2013 curriculum by using the scientific approach in the fourth semester class even in the academic year 2017-2018, in the mathematics lesson of flat waking material. Basic Competence 3.9 Explains and determines the circumference and area of square, rectangle, and triangle as well as the power relations of two with square roots. The systematical presentation of the material in textbook mathematics through fable stories using Problem Based Learning model as follows: 1) Student orientation to the problem (Student orientation to authentic issues). 2) Organize students in learning 3) Assist students individually or in groups in conducting research (Guiding students individually or in groups in conducting research). 4)

Develop and present the work (Developing and presentation the work). 5) Analysis and evaluation of problem-solving process (Analysis and evaluation of troubleshooting process).

According to Müller, Tanja et al (2017) This journal is in accordance with the research that researchers are developing is how to use a good learning model and in accordance with the needs of students to make students increased learning outcomes. The evaluation tool used in this research is through material analysis and authentic assessment (assessment of knowledge and attitude).

### *3.3 Development of Initial Product Format*

The steps that researchers do on initial product development are: a). Collect material that is in accordance with the material that has been determined. b). Determine the elements of teaching materials consisting of three elements, namely Introduction, content and support. c). Designing the look of textbook Mathematics based on fable character. d). Arrange the elements of fable-based mathematics textbooks characterized in accordance with the design made.

1) Introduction consists of: (a) Front cover of title / home page, (b) Preface, (b) Excess of teaching materials, (c) Translation of KI, KD and Indicator, (d) (e) and Table of Contents. 2) The Content section consists of: (a). Introductory Story (b) Observation of Objects, (c) Planting of Materials, (d) Conceptual Understanding, and (e) Student Ability Test. 3) Supporting Section consists of: (a) Bibliography (b) Concept Map and (c) Glossary (d) Key Answer (e) Author Biography.

### *3.4 Initial Product Trial By Experts*

This initial test is done by validating 3 aspects, namely the material or content aspect by Mr. Caswita, M.Si. As a lecturer of material experts. Material validation to assess material conformity with indicators, learning objectives, and breadth of material. Media aspect or interest by Mr. Alben Ambarita, M.Pd. As an expert lecturer Media. Validate this medium to assess the appropriateness of the book content, color match, illustrations, and textbook layout. Language aspect by Mrs. Dr. Siti Samhati, M.Pd. As a lecturer of Language. Language validation to assess the accuracy of sentence structure, use of language rules, use of general Indonesian spelling guidelines, and easy-to-understand sentences.

### *3.5 Product Revision*

Based on the results of initial product trials and suggestions from by experts, the researchers revised the product. The revisions are as follows. a). Fixed the appearance of the textbook cover by providing an illustration that corresponds to the mathematics of the flat wake material and the animal characters according to the fable story. b). The image used refers to a clear source. c). Adjust indicator with learning objectives and Basic Competence bill. d). The colors and images refer to the original image. e). The material is presented from simple to complex.

### *3.6 Product Trial on the Ground*

On product trials in the field testing was conducted to test learning outcomes after using fable-based mathematics textbooks. This trial was conducted by involving two elementary schools, namely the fourth grade students of SDN 2 Tulungagung as an experimental class with the number of 30 students and SDN 3 Tulungagung as the control class with the number of students 30. The implementation of the fable-based mathematics teaching experiments conducted from 7 to 12 May 2018.

#### *3.6.1 First Hypothesis Test*

The first hypothesis tested in the research is the realization of mathematics textbook through fable story using Problem Based Learning. Testing the first hypothesis by testing the validation of the content made by some experts who are competent on teaching materials, namely material experts, media experts and linguists. Validation is needed to assess the feasibility of developed textbook products, this validation is done by means of questionnaire so that it can be known weakness and strength.

**Table. 2 First Hypothesis Test Results**

Expert	Score	Results
Material	3,3	Good
Media	3,4	Good
Language	3,7	Good

Based on the data in the table above, it is known that the assessment of material experts to the mathematics textbook developed through fable stories using Problem Based Learning obtained average score score 3.3 with good category. While the assessment of media experts on textbooks of mathematics developed through fable stories using Problem Based Learning obtained average score score 3.4 with good category. Further assessment of linguists to mathematics textbooks developed through fable stories using Problem Based Learning obtained average score score 3.7 with good category.

### 3.6.2 Second Hypothesis Test

The second hypothesis tested in this study is the attractiveness of mathematics textbooks through fable stories using Problem Based Learning. Tests of the attractiveness of this textbook obtained by giving a questionnaire to 10 teachers of Class IV elementary school joined in cluster III Tulungagung District Gadingrejo.

**Table. 3 Second Hypothesis Test Results**

Score	Value	Classification of Attraction	Frequency	Percent of Answers
5	90 - 100	Very interesting	6	60%
4	70 - 89	Interesting	4	40%
3	60 - 69	Quite interesting	0	0%
2	40 - 59	Less attractive	0	0%
1	0 - 39	Not attractive	0	0%

Based on table.3 it is known that the use of mathematics textbook through fable story using Problem Based Learning is categorized very interesting, because of 10 teachers of elementary school group III Tulungagung as many as 4 teachers or 40% said interesting, and as many as 6 teachers or 60% states very interesting. Thus the majority of elementary school teachers in the third group Tulungagung Tulungagung test on the test stated that the mathematics textbook through fable stories using Problem Based Learning is very interesting.

### 3.6.3 Third Hypothesis Test

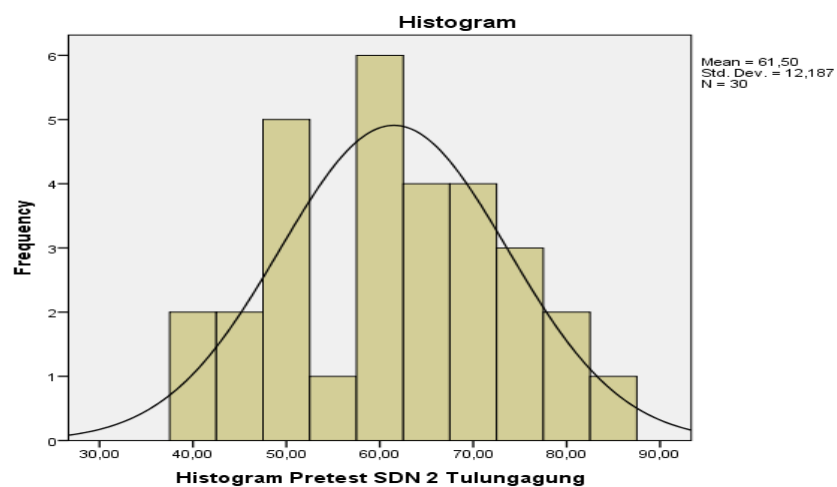
**Table. 4 Data on Student Results Pretest and Posttest.**

Learning Results Data	SDN 2 Tulungagung (Experiment Class)		SDN 3 Tulungagung (Control Class)	
	<i>Pretest</i>	<i>Posttest</i>	<i>Pretest</i>	<i>Posttest</i>
<i>N</i>	30	30	30	30
<i>Mean</i>	61,50	75,00	64,67	75,00
<i>Median</i>	60,00	75,00	65,00	75,00
<i>Mode</i>	60,00	70,00	60,00	70,00
<i>Minimum</i>	40,00	55,00	40,00	50,00
<i>Maximum</i>	85,00	95,00	80,00	95,00
<i>Sum</i>	1845,0	2250,0	1845,0	2250,0
<i>N Gain</i>	0,39		0,31	

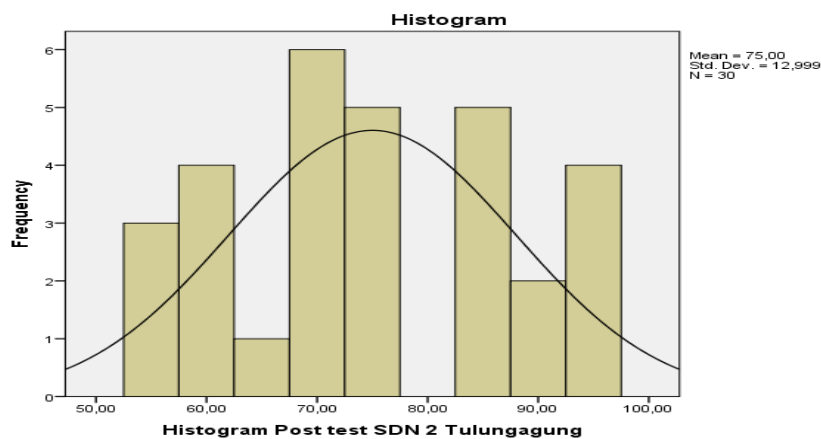


In table.4, it is found that the average of students' mathematics learning outcomes in experimental group and control class test has increased before and after using mathematics textbook through fable story using Problem Based Learning. Thus it can be concluded that the results of the fourth grade mathematics learning in both elementary schools are equally increased, but the improvement in the experimental class is higher than the control class. View histogram images of learning achievement before and after learning.

Histogram Pretest SDN 2 Tulungagung				
	Frequency	Percent	Valid Percent	Cumulative Percent
	40,00	2	6,7	6,7
	45,00	2	6,7	13,3
	50,00	5	16,7	30,0
	55,00	1	3,3	33,3
	60,00	6	20,0	53,3
Valid	65,00	4	13,3	66,7
	70,00	4	13,3	80,0
	75,00	3	10,0	90,0
	80,00	2	6,7	96,7
	85,00	1	3,3	100,0
Total	30	100,0	100,0	



Histogram Post test SDN 2 Tulungagung				
	Frequency	Percent	Valid Percent	Cumulative Percent
	55,00	3	10,0	10,0
	60,00	4	13,3	23,3
	65,00	1	3,3	26,7
	70,00	6	20,0	46,7
Valid	75,00	5	16,7	63,3
	85,00	5	16,7	80,0
	90,00	2	6,7	86,7
	95,00	4	13,3	100,0
Total	30	100,0	100,0	



Based on normality test results note that student learning outcomes come from a population that is not normally distributed. The third hypothesis was tested by nonparametric test, Mann Whitney U test, this is because the student's learning result came from the non-normal distributed population. The formula used is as follows.

$$U_1 = n_1 n_2 + \frac{n_1(n_1 + 1)}{2} - \sum R_1$$

$$U_2 = n_1 n_2 + \frac{n_2(n_2 + 1)}{2} - \sum R_2$$

Testing criteria is  $H_0$  accepted if value  $Z_{count} > Z_{table}$ . With  $\alpha = 0,05$ .

**Tabel. 5 Uji Non Parametrik Hipotesis Ketiga**

Data	Total of students	$Z_{count}$	$Z_{table}$	Conclusion
SDN 2 Tulungagung	30	6,65	1,96	$H_0$ accepted
SDN 3 Tulungagung	30			

In the table. 5 can be seen that the value  $Z_{count}$  greater than the value  $Z_{tabel}$  that is  $6,65 > 1,96$ . Thus it can be



concluded that  $H_0$  accepted that "There is an increase in mathematics learning outcomes of students after using textbooks mathematics through story Fable using Problem Based Learning in class IV SDN 2 Tulungagung.

While based on testing using SPSS Mann Whitney U test the basic values of decision making are:

If the value of Asymp.Sig  $< 0,05$ , then Hypothesis accepted

If the value of Asymp.Sig  $> 0,05$ , then the Hypothesis is rejected

#### Mann-Whitney Test

	Class	N	Mean Rank	Sum of Ranks
Results of pretest and posttest SDN 2 Tulungagung	Results Pretest SDN 2 Tulungagung	30	22,65	679,50
	Post Test Result SDN 2 Tulungagung	30	38,35	1150,50
	Total	60		

Test Statistics <sup>a</sup>	
	Results of pretest and posttest SDN 2 Tulungagung
Mann-Whitney U	214,500
Wilcoxon W	679,500
Z	-3,507
Asymp. Sig. (2-tailed)	0,000

a. Grouping Variable: Kelas

Based on the statistics test output it is known that the Asymp.Sig (2-tailed) value is  $0.000 < 0.05$ . Then it can be concluded that the hypothesis is accepted. Thus it can be said that "There is an increase in student learning outcomes after using mathematics textbooks through Fable stories using Problem Based Learning in grade IV SDN 2 Tulungagung".

#### 4. Discussion

Development of textbooks of mathematics through fable stories using Problem Based Learning, with the following steps: 1) Collection of preliminary information 2) Planning 3) Development of initial product formats 4) Experimental testing of materials, 5) Product revisions 6) Field trials 7) Product revisions. Researchers take only 7 steps from 10 steps developed by Borg and Gall. This is done due to limited time and cost. Based on these reasons, the researcher has aligned the development research procedure and adjusted to the purpose and condition of the actual research.

The steps of Problem Based Learning model are: 1). Orients students on issues. Helps students develop thinking skills and solve problems. 2). Organize students to learn. Learn the various roles of adults through their involvement in real and authentic experiences. 3). Assist in independent and group investigations. Making students try to think critically and able to develop their analytical skills and become independent learners. 4). Develop and present the work. 5). Analyze and evaluate the problem-solving process. The steps of textbook development are also conducted in accordance with the steps of the Problem Based Learning model in accordance with the opinions expressed by Ibrahim and Nur in Suprihatiningrum, (2013: 223) covering the following activities: 1) Student orientation to authentic issues). 2) Organize students in learning (Organize students in learning). 3) Assist students individually or in groups in conducting research (Guiding students individually or in groups in conducting research). 4) Develop and present the work (Developing and presentation the work). 5) Analysis and evaluation of problem-solving process (Analysis and evaluation of troubleshooting process).

Based on relevant research and expert opinion that the development of textbooks obtained is the realization of textbooks of mathematics through fable stories using Problem Based Learning, which according to the characteristics or needs of students, interesting, strengthening the character and can improve student learning outcomes of mathematics, especially students in class IV SDN 2 Tulungagung.

The Interest of Mathematics Textbook Through Fable Story Using Problem Based Learning Based on the result of questionnaire distribution to know the attractiveness of mathematics textbook through fable story using Problem Based Learning, seen from the response or response of elementary school teacher in cluster III Tulungagung towards the use of mathematics textbook through fable story using Problem Based Learning. The result of the attractiveness test of mathematics textbook through fable story using Problem Based Learning obtained data that the average percentage of mathematics textbook attraction through fable story using Problem Based Learning 92% which is categorized very interesting.

The results of this study are in accordance with the opinion of Yıldırım, Rana et al (2014) in an international journal entitled "Exploring The Value Of Animated Stories With Young English Language Learners" The author explains that Stories can be used as a very valuable learning resource that can support children meaningfully . Moreover with their interesting themes, plots, and characters have great potential to give to grow the character and knowledge of students.

While the value of student attitudes in the experimental class that is the fourth grader of SD Negeri 2 Tulungagung is 0.74 High Categorized. Thus it can be concluded that the strengthening of honest values, discipline, and responsibility of students in grade IV of SD Negeri 2 Tulungagung after using mathematics textbook through fable story using Problem Based Learning. In accordance with Almerico's research, M.Gina (2014) In his research defined the characteristics of an effective character development program for elementary school children built at the age of the children.

Based on non parametric hypothesis test by using Mann Whitney U test result obtained that the result of mathematics learning after using mathematics textbook through fable story using Problem Based Learning, higher than before using mathematics textbook through fable story using Problem Based Learning. This is because the value of Z arithmetic greater than the value of Z table is  $6.65 > 1.96$ . Thus from the comparison, the null hypothesis ( $H_0$ ) is accepted and the alternative hypothesis ( $H_1$ ) is rejected that is "there is a difference of mathematics learning result after using mathematics textbook through fable story using Problem Based Learning, compared before using mathematics textbook through fable story using Problem Based Learning ". It means that the better the use of mathematics textbooks through fable stories using Problem Based Learning will increase learning outcomes. The results of hypothesis testing is also proved by the increase of student learning outcomes then the character of students also increased.

## 5. Conclusion

Based on the results of research and discussion can be taken conclusion seabagi following. The realization of the product in the form of textbook book of mathematics through fable story to strengthen the character of students using Problem Based Learning class IV SDN 2 Tulungagung. Mathematics textbooks through fable stories using Problem Based Learning interesting category in order to strengthen the character and improve learning outcomes Mathematics students Class IV SDN 2 Tulungagung. The improvement of mathematics learning outcomes of students is higher after using mathematics textbooks through fable stories using Problem Based Learning than before using the textbook.

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